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DERWENT-ACC-NO: 2002-147883

DERWENT-WEEK: 200235

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TITLE: New isolated human CUB domain containing polypeptide 56739,

useful for

. **

treating metabolic, immunological, neurological, bone, cardiovascular, liver,

pain, viral, cell proliferative and differentiative disorders

INVENTOR-NAME: KAPELLER-LIBERMANN, R

PRIORITY-DATA: 2000US-213963P (June 23, 2000)

PATENT-FAMILY

| PUB-NO MAIN-IPC | PUB-DATE | LANGUAGE | PAGES |
|-----------------------------------|-----------------|----------|-------|
| AU 200177847 A Cl2N 000/00 | January 8, 2002 | N/A | 000 |
| WO 200200843 C12N 000/00 A2 | January 3, 2002 | Е | 107 |

INT-CL (IPC): C12N000/00

ABSTRACTED-PUB-NO: WO 200200843A

BASIC-ABSTRACT: NOVELTY - An isolated human CUB (undefined) domain

containing

polypeptide (I), termed 56739 comprising a sequence (S1) of 418 amino acids $\,$

fully defined in the specification, is new.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

- (1) an isolated nucleic acid (NA) (II) selected from a NA comprising a sequence of 2067 or 1257 base pairs fully defined in the specification, and a NA which encodes (I);
- (2) a host cell (III) containing (II);
- (3) an antibody (IV) which selectively binds (I);
- (4) production of (I);
- (5) detecting (M1) the presence of (II) in a sample by contacting the sample with a nucleic acid probe or primer which selectively hybridizes to (II), and

determining whether the probe or primer binds to (II) in the sample;

- (6) a kit (V) comprising a compound which selectively binds to (I) or hybridizes to (II), and instructions for use;
- (7) modulating (M2) the activity of (I) by contacting (I) or a cell expressing
- (I) with a compound which binds to (I);

- (8) inhibiting (M3) the aberrant activity of 56739-expressing cell, by contacting the cell with a compound that modulates the activity or expression of (I) or (II); and
- (9) treating (M4) or preventing, in a subject, a disorder characterized by aberrant activity of a 56739-expressing cell, by administering to the subject a compound that modulates the activity or expression of (II).

ACTIVITY - Cytostatic; antidiabetic; antirheumatic; antiarthritic; neuroprotective; antipsoriatic; antiasthmatic; antiallergic; immunosuppressive; nootropic; neuroprotective; antiparkinsonian; osteopathic; hypotensive;

antiatherosclerotic; virucide; analgesic.

MECHANISM OF ACTION - Gene therapy; modulator of 56739-mediated activities; modulator of extracellular matrix environment; regulator of developmental processes; modulator of dorsal-ventral polarity; modulator of cell proliferation or differentiation. No supporting data is given.

USE - (IV) is useful for detecting the presence of (I) in a sample by contacting the sample with (IV), and determining whether (IV) binds to (I) in

the sample. (I) is useful for identifying a compound which binds to (I) by

contacting (I), or a cell expressing (I) with a test compound, and determining

whether (I) binds to the test compound (claimed). (I) or (II) is useful for

developing novel diagnostic and therapeutic agents for 56739-mediated or related disorders such as cell proliferative and differentiative disorders

(e.g., cancer), metabolic disorders (e.g., diabetes mellitus), immunological

disorders (e.g., rheumatoid arthritis, multiple sclerosis, psoriasis, Sjogren's

syndrome, asthma, allergy, graft-versus-host disease), neurological disorders

(Alzheimer's disease, Parkinson's disease), bone disorders (e.g., osteoporosis), cardiovascular disorders (e.g., hypertension, atherosclerosis),

liver disorders (e.g., Gaucher's disease), viral diseases, and pain disorders $% \left(1\right) =\left(1\right) \left(1\right) \left($

(e.g., headaches) . (I), (II) or (IV) is useful in screening assays, detection

assays (e.g., chromosomal mapping, tissue typing, forensic biology), predictive

medicine (e.g., diagnostic assays, prognostic assays, monitoring clinical trials and pharmacogenomics), and in methods of treatment (e.g., therapeutic

and prophylactic). (I) or (IV) is useful as reagents or targets in assays $% \left(1\right) =\left\{ 1\right\} =$

applicable to treatment and diagnosis of 56739-mediated or related disorders.

(I) or (II) is useful as query sequences to perform a search against

public databases to, for e.g., identify other family members or related sequences. (I) is useful as an immunogen to generate antibodies that bind (I). (I) useful to screen for naturally occurring 56739 substrates, and to screen for drugs or compounds which modulate 56739 activity. (I) is useful as a bait protein in a yeast two-hybrid or three-hybrid assay and to identify other proteins which bind to or interact with 56739 and or involved in the 56739 activity. (II) is useful as hybridization probe to identify (II), or as polymerase chain reaction (PCR) primer for the amplification or mutation of (II). (II) is useful in gene therapy, to express (I), to detect 56739 mRNA or a genetic alteration in a 56739 gene, and to modulate 56739 activity. (II) is useful to map their respective genes on a chromosome, e.g. to locate gene regions associated with genetic disease or to associate 56739 with the disease, to identify an individual from a minute biological sample (tissue typing), and to aid in forensic identification of the biological sample. (IV) is useful to isolate and purify (I), to detect (I) and to diagnostically monitor protein

levels in tissue as part of a clinical testing procedure.

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DERWENT-ACC-NO: 2000-664924
DERWENT-WEEK: 200237
COPYRIGHT 1999 DERWENT INFORMATION LTD
TITLE: Polypeptide expressed in mammalian fsn -/- lymph node stromal
cells,
useful for modulating growth of blood cells, for treating inflammatory
tumor necrosis factor-mediated disorders, cancer and viral disorders
INVENTOR-NAME: ABERNETHY, N; KUMBLE, K D; MURISON, J G; ONRUST, R;
M ; STRACHAN, L ; KUMBLE, A ; MURISON, G
PRIORITY-DATA: 1999US-0383586 (August 26, 1999) , 1999US-0276268 (March
25,
1999)
PATENT-FAMILY:
PUB-NO
                    PUB-DATE
                                               LANGUAGE
                                                              PAGES
MAIN-IPC
                    May 16, 2002
                                               N/A
                                                              000
US 20020058335
C12N 005/06
                    October 5, 2000
                                                              074
Α1
Ø12N 015/12
WO 200058463
                    October 16, 2000
                                               N/A
                                                              000
C12N 015/12
                    June 5, 2001
                                               N/A
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AΊ
A01N 037/18
AU 200027021 A
                                                              000
                    December 19, 2001
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C12N 015/12
US 6242419 B1
EP 1163334 A1
INT-CL_(IPC): A01N037/18; A61K038/00; A61K038/16; A61K038/18;
A61K048/00; C07H021/04; C07K014/50; C12N005/06; C12N015/12
ABSTRACTED-PUB-NO: US 6242419B
BASIC-ABSTRACT: NOVELTY - An isolated polypeptide (I) expressed in lymph
node
stromal cells of fsn -/- mice, comprising a sequence selected from 26
defined
and given in the specification e.g. 196, 174, 268, 439, 322, 574, 464,
199, 757
or 925 amino acids, is new.
DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the
following:
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- (1) an isolated polynucleotide (II) that encodes (I) comprising a sequence (or its complement, reverse complement or sequences of 40%, 60%, 75% or 90% identity as determined using the computer algorithm BLASTN (basic local alignment search tool)) selected from 26 defined and given in the specification e.g. 803, 689, 1197, 1131, 478, 1742, 1587, 2435, 1008, 925 and 3767 base
- pairs (bp);
- (2) an isolated polynucleotide comprising a sequence selected from a

sequence that is a 200-mer, 100-mer and 40-mer of (II);

- (3) an expression vector (III) comprising (II);
- (4) a host cell (IV) transformed with (III); and
- (5) a pharmaceutical composition (V) comprising (I) or (II).

ACTIVITY - Cytostatic; antiinflammatory; anti-HIV (human immunodeficiency virus); antiarthritic; cardiant; virucide; dermatological; immunosuppressive; angiogenic.

No biological data is given.

MECHANISM OF ACTION - Vaccine; gene therapy.

No biological data is given.

USE - (V) is useful for treating an inflammatory disorder, disorder of immune

system and cancer selected from epithelial, lymphoid, myeloid, stromal and

neuronal cancers, a viral disorder, in particular HIV-infection and for modulating the growth of blood vessels. (I) is useful for treating a tumor

necrosis factor (TNF) mediated disorder selected from arthritis, inflammatory

bowel disease and cardiac failure and a fibroblast growth factor-mediated disorder. (I) is also useful in assays to determine biological activity, to

raise antibodies, to isolate corresponding ligands or receptors, to quantify

levels of protein or cognate corresponding ligand or receptors, as antiinflammatory agents, and in compositions for the treatment of skin, connective tissue and immune system diseases. (II) is useful as marker for

tissue, as a chromosome marker or tags in the identification of a genetic disorder.

ABSTRACTED-PUB-NO: US20020058335A EQUIVALENT-ABSTRACT: NOVELTY - An isolated polypeptide (I) expressed in lymph node stromal cells of fsn -/- mice, comprising a sequence selected from 26 defined and given in the specification e.g. 196, 174, 268, 439, 322, 574,

464, 199, 757 or 925 amino acids, is new.

 ${\tt DETAILED}$ ${\tt DESCRIPTION}$ - ${\tt INDEPENDENT}$ CLAIMS are also included for the following:

(1) an isolated polynucleotide (II) that encodes (I) comprising a sequence (or its complement, reverse complement or sequences of 40%, 60%, 75% or 90% identity as determined using the computer algorithm BLASTN (basic local alignment search tool)) selected from 26 defined and given in the

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specification
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pairs
(bp);
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- (2) an isolated polynucleotide comprising a sequence selected from a sequence that is a 200-mer, 100-mer and 40-mer of (II);
- (3) an expression vector (III) comprising (II);
- (4) a host cell (IV) transformed with (III); and
- (5) a pharmaceutical composition (V) comprising (I) or (II).

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No biological data is given.

- 2

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No biological data is given.

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- (5) a pharmaceutical composition (V) comprising (I) or (II).

ACTIVITY - Cytostatic; antiinflammatory; anti-HIV (human immunodeficiency virus); antiarthritic; cardiant; virucide; dermatological; immunosuppressive; angiogenic.

No biological data is given.

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tissue, as a chromosome marker or tags in the identification of a genetic disorder.